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PTO/SB/92 (08-03)

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on May 28, 2004

Date

Virginia Dress

Signature

Virginia Dress

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

- 1) Request for Certificate of Correction of Patent for PTO Mistake/2 Pages (1 copy)
- 2) Certificate of Correction/1 Page (2 copies)
- 3) Copy of Notice of Allowability w/Examiner's Amendment Issued 11/24/03 Amending Title/4 Pages (1 copy)

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

JUN 08 2004



**Attorney Docket No. 1107E**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent Number : 6,720,478 B1  
Issued : April 13, 2004  
Name of Patentee : Pioneer Hi-Bred International, Inc.  
Title of Invention : RAD51-Like Polynucleotide and Uses Thereof

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT  
FOR PTO MISTAKE (37 CFR 1.322(a))**

1. Attached, in duplicate, is Form PTO/SB/44, with at least one copy being suitable for printing.
2. The exact page and line number where the errors are shown correctly in the application file are:

Notice of Allowability, issued November 24, 2003, Page 3, Examiner's Amendment, the Title was amended as follows:

A Maize Rad51-Like Polynucleotide and Uses Thereof

The above Examiner's Amendment to the Title is not reflected in the issued patent. A copy of the Examiner's Amendment (4 pages) is enclosed for the convenience of the Office.

3. Please send the Certificate to:

Name : Virginia Dress  
Address: Pioneer Hi-Bred International, Inc.  
Corporate Intellectual Property  
7100 N.W. 62<sup>nd</sup> Avenue

JUN 08 2004

Patent No. 6,720,478 B1  
Attorney Docket No. 1107E

P.O. Box 1000  
Johnston, Iowa 50131-1000

Respectfully submitted,



Virginia Dress  
Agent for Applicant(s)  
Registration No. 48,243

PIONEER HI-BRED INTERNATIONAL, INC.  
Corporate Intellectual Property  
7100 N.W. 62<sup>nd</sup> Avenue  
P.O. Box 1000  
Johnston, Iowa 50131-1000  
Phone: (515) 270-4192  
Facsimile: (515) 334-6883

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : US 6,720,478 B1

DATED : April 13, 2004

INVENTOR(S) : Pramod B. Mahajan, Urbandale, IA (US); Jinrui Shi, Johnston, IA (US)

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:


On the Title Page, Item (54) and Column 1:

(54) A MAIZE RAD51-LIKE POLYNUCLEOTIDE AND USES THEREOF

MAILING ADDRESS OF SENDER: Pioneer Hi-Bred International, Inc.  
7100 NW 62<sup>nd</sup> Avenue  
P.O. Box 1000  
Johnston, IA 50131-1000

PATENT NO. 6,720,478 B1

No. of additional copies

 Page 1 of 1

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

JUN 08 2004

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : US 6,720,478 B1

DATED : April 13, 2004

INVENTOR(S) : Pramod B. Mahajan, Urbandale, IA (US); Jinrui Shi, Johnston, IA (US)

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On the Title Page, Item (54) and Column 1:

(54) A MAIZE RAD51-LIKE POLYNUCLEOTIDE AND USES THEREOF

MAILING ADDRESS OF SENDER: Pioneer Hi-Bred International, Inc.  
7100 NW 62<sup>nd</sup> Avenue  
P.O. Box 1000  
Johnston, IA 50131-1000

PATENT NO. 6,720,478 B1

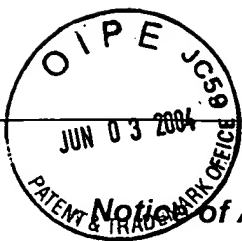
No. of additional copies

 Page 1 of 1

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

JUN 08 2004



## Notice of Allowability

Application No.

09/537,654

Examiner

Anne R. Kubelik

Applicant(s)

MAHAJAN ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

**DOCKETED**

DEC 02 2003

1. ☒ This communication is responsive to 18 August 2003.
2. ☒ The allowed claim(s) is/are 2-10, 12, 25, 28-34, renumbered claims 10-18, 9 and 1-8, respectively.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |  |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)         |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____  | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                 |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance           |
|  | 9 <input type="checkbox"/> Other   |

*Examiner's Amendment*

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Virginia Dress on 12 November 2003.

IN THE CLAIMS:

Claim 9 (Amended) A method of modulating the level of RAD51C in a plant,  
[comprising] wherein the method comprises:

- (a) introducing into a plant cell a recombinant expression cassette comprising the polynucleotide of claim 25 operably linked to a promoter;
- (b) culturing the plant cell [under plant cell growing conditions]; and
- (c) regenerating a whole plant [which possesses the transformed genotype;], wherein the plant expresses [and
- (d) expressing] said polynucleotide [for a time sufficient to modulate], thereby modulating the level of RAD51C in said plant.

IN THE ABSTRACT

The invention provides an isolated RAD51C nucleic [acids and their encoded proteins] acid from maize. The present invention provides methods and compositions relating to altering

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RAD51C levels in plants. The invention further provides recombinant expression cassettes, host cells, and transgenic plants[, and antibody compositions].

IN THE TITLE

A MAIZE RAD51-LIKE POLYNUCLEOTIDE [POLYNUCLEOTIDES] AND USES

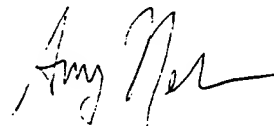
THEREOF

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (703) 308-5059. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm. Sometime in January 2004, the examiner's phone number will change to (571) 272-0801.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (703) 308-0198.

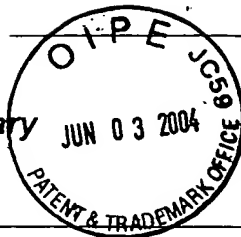
Anne R. Kubelik, Ph.D.  
November 12, 2003



AMY J. NELSON, PH.D.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600



# Interview Summary



Application No.

09/537,654

Applicant(s)

MAHAJAN ET AL.

Examiner

Anne R. Kubelik

Art Unit

1638

All participants (applicant, applicant's representative, PTO personnel):

(1) Anne R. Kubelik.

(3) \_\_\_\_\_.

(2) Virginia Dress.

(4) \_\_\_\_\_.

Date of Interview: 12 November 2003.

Type: a) ☒ Telephonic b) ☐ Video Conference

c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: all.

Identification of prior art discussed: \_\_\_\_\_.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant approved the proposed claim amendments.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required